



# SCRIPTING CUSTOM FORMS



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(the PEPFAR installation of DHIS 2)



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1.

DEFAULT FORMS

## HIV Status (Inc Unknown) and

Filter in section

**Positive**

**Male**

VMMC\_CIRC (N, DSD, HIVStatus/Sex): Voluntary Circumcised

VMMC\_CIRC (N, TA, HIVStatus/Sex): Voluntary Circumcised

Filter in section

**MSM S**

KP\_PREV (N, DSD, KeyPop) v2: Key Pop Preventive

KP\_PREV (N, TA, KeyPop) v2: Key Pop Preventive

# DHIS 2 STANDARD FORM

GEND\_GBV

HTS\_TST

KP\_PREV

VMMC\_CIRC

Filter in section

&lt;10

Female

Male

GEND\_GBV (N, DSD, Age/Sex/PEP): GBV Care

GEND\_GBV (N, TA, Age/Sex/PEP): GBV Care

Filter in section

Value

GEND\_GBV (N, DSD): GBV Care

GEND\_GBV (N, TA): GBV Care

Filter in section

Sexual Violence  
(Post-Rape Care)

GEND\_GBV (N, DSD, Age/Sex/ViolenceType) v2: GBV Care

GEND\_GBV (N, TA, Age/Sex/ViolenceType) v2: GBV Care

# DHIS 2

# SECTION

# FORM

# DHIS 2 FORMS

- ▶ Default
  - ▷ Alphabetic
  - ▷ Category combos all separate
- ▶ Section
  - ▷ Category combos *still* separate
- ▶ Custom
  - ▷ Exactly how you want it
  - ▷ ...Difficult to maintain

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# 2.

## CUSTOM FORMS



Prevention

90 = Knowing HIV Status

Health Systems

DSDTA-SDI

- Collapse All

DSD: KP\_PREV (Numerator)

Auto-Calculate

Number of key populations reached with indi  
population. Numerator will auto-calculate fro

Numerator

15

Required

Disaggregated by Key Population Type

PWID

Female

Male

1

2

3

Sex workers

Female

MSM

TG

3

4

7

Non Sex Workers

MSM

TG

5

People in prisons and other enclosed  
settings

Required

Disaggregated by Status / K

PWID

MS

Known Positive

Newly tested and / or referred for  
testing

Declined testing and / or referral

CUSTOM  
RESULT

# CUSTOM FEATURES

- ▶ Vertical and horizontal tabbed navigation
- ▶ Autocalculation
- ▶ Mutual exclusion
- ▶ Validation rules
- ▶ Drafts in static HTML

# CUSTOM PROCESS

- ▶ Numerous
- ▶ Frequent
- ▶ Many entry fields
- ▶ Interactive
- ▶ Precise
- ▶ Urgent

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# 3.

## THE APPROACH

# CONTROL FILE PROCESSED BY SCRIPT

- ▶ Spreadsheet control file (CSV)
- ▶ HTML templates
- ▶ Python script processes them to create assets to upload to DHIS 2
- ▶ The two together are called MERTide  
(MER = *Monitoring, Evaluation, and Reporting*)

Type	form_name	vtab_name	ind_name	ind_freq	ctl_uniqueid	ctl_ex	ctl_r
FORM	MERTIDE Custom Form						
VTAB		Prevention					
IND			VMMC_CIRC	Quarterly			
SUB					vmmc_circ_numerator		
SUB					vmmc_circ_5year		
SUB							
SUB							
IND			KP_PREV (N	Semiannually			
SUB							
SUB					kp_prev_numerator		
SUB							
IND			GEND_GBV	Annually			
SUB					gend_gbv_numerator		
SUB							
SUB							
SUB					gend_gbv_violence_service_type		
SUB					gend_gbv_pep		
VTAB		90 = Knowing HIV Status					
IND			HTS_TST (Fac	Quarterly			
SUB					hts_tst_facility_numerator		
SUB							
FORM	MERTIDE Section Form						
VTAB		Prevention					
IND			VMMC_CIRC	Quarterly			
SUB					vmmc_circ_numerator		
SUB					vmmc_circ_5year		
SUB							
SUB							
IND			KP_PREV (N	Semiannually			
SUB							
SUB					kp_prev_numerator		
SUB							
IND			GEND_GBV	Annually			
SUB					gend_gbv_numerat		
SUB							

CONTROL  
FILE

# CONTROL FILE FEATURES

- ▶ FORM, VTAB, IND, SUB
- ▶ HTML template
- ▶ Rules
  - ▷ Mutual exclusive
  - ▷ Autocalculation
  - ▷ DHIS 2 Rules
  - ▷ Frequency Locks

# FILES GENERATED

- ▶ A file to import the forms into DHIS 2
- ▶ Three files to import the validation rules into DHIS 2
- ▶ Static HTML versions of the forms



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4.

CODA

# FUTURE WORK

- ▶ Better documentation for open source repository
- ▶ DHIS 2 validation rules implemented in form's Javascript
- ▶ Improved code quality (CSS, Python, etc.)
- ▶ Speed improvements with fewer API calls
- ▶ Option for Javascript-only DHIS 2 form customization

# COLLABORATORS

- ▶ Jim Grace (HISP US)
- ▶ Tim Harding (BAO)
- ▶ Greg Wilson (BAO)

# THANKS!

## Any questions?

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Supporting files on Github: [bit.ly/hispus\\_scf](https://bit.ly/hispus_scf)

Open source repo: [github.com/pepfar-datim/mertide-public](https://github.com/pepfar-datim/mertide-public)